ABSTRACT

A spatial information detecting device for accurately detecting information of a target space is provided. This device has photoelectric converters for receiving a reflection light from the space, in which a flashing light is being irradiated, a charge storage portion formed in each of the photoelectric converters by applying a control voltage to electrodes on each of the photoelectric converters, a controller for controlling the number of electrodes, to which the control voltage is applied, such that an area of the charge storage portion changes based on a flash cycle of the flashing light, and an amplitude-image generator for generating an amplitude image having pixel values, each of which is provided by a difference between electric charges collected in a lighting period of the flashing light by a charge storage portion and the electric charges collected in a non-lighting period of the flashing light by another charge storage portion.